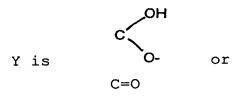
- 1. A substance, characterized in that it is a polycyclic macrolactone and can be produced by a representative of the bacterial genus *Verrucosispora*.
- 2. A substance as claimed in claim 1, characterized in that it exhibits a pharmacological effect, in particular an antibiotic effect.
- 3. A substance as claimed in claim 1 or claim 2, characterized in that it exhibits an antibiotic effect towards Gram-positive bacteria.
- 4. A substance as claimed in one of the preceding claims, characterized in that the representative of the bacterial genus *Verrucosispora* is the bacterial strain AB 18-032 (DSM 15899).
- 5. A substance, in particular as claimed in one of claims 1 to 4, characterized by the general Formula I together with all the possible relative configurations

where X is C=O or C-OH



Z is
$$C=N-$$
 or CH or CH_2 .

6. A substance as claimed in claim 5, characterized by the Formula II together with all the possible relative configurations

(II)
$$H_{3}\overset{16}{C}$$

$$O = \overset{19}{C}H_{3}$$

$$O =$$

7. A substance as claimed in claim 5, characterized by the Formula III together with all the possible relative configurations

(III)
$$H_3C$$
 H_3C H

8. A substance as claimed in claim 5, characterized by the Formula IV together with all the possible relative configurations

- 9. A substance, in particular as claimed in one of the preceding claims, characterized in that it inhibits the synthesis of para-aminobenzoic acid, in particular the synthesis of para-aminobenzoic acid from chorismic acid.
- 10. A substance, in particular as claimed in one of the preceding claims, characterized in that it is a polycyclic macrolactone and, as constituent structures, exhibits at least one oxabicyclo system and at least one Michael system as double bond system.
- 11. A substance, characterized in that it is a derivative of a polycyclic macrolactone as claimed in one of the preceding claims.
- 12. A pharmaceutical composition, characterized in that it comprises at least one substance as claimed in one of the preceding claims and at least one pharmaceutically acceptable excipient.
- 13. A pharmaceutical composition, characterized in that it comprises at least one substance which inhibits the

synthesis of para-aminobenzoic acid from chorismic acid and at least one pharmaceutically acceptable excipient.

- 14. The use of a substance as claimed in one of claims 1 to 11 for treating infectious diseases which are at least concomitantly influenced by bacteria and/or protozoa.
- 15. The use of a substance as claimed in one of claims 1 to 11 for producing a drug for treating infectious diseases which are at least concomitantly influenced by bacteria and/or protozoa.
- 16. The use of a substance for treating infectious diseases which are at least concomitantly influenced by bacteria and/or protozoa, characterized in that the substance inhibits the synthesis of para-aminobenzoic acid from chorismic acid.
- 17. The use of a substance for producing a drug for treating infectious diseases which are at least concomitantly influenced by bacteria and/or protozoa, characterized in that the substance inhibits the synthesis of para-aminobenzoic acid from chorismic acid.
- 18. The use as claimed in claim 16 or claim 17, characterized in that at least one substance as claimed in one of claims 1 to 11 is employed.
- 19. The use as claimed in one of claims 14 to 18, characterized in that at least some of the bacteria are Grampositive bacteria.
- 20. The use as claimed in one of claims 14 to 19, characterized in that the bacteria and/or protozoa are resistant, in particular multiresistant, to conventional antibiotics.

- 21. A method for controlling microorganisms, in particular bacteria and/or protozoa, characterized in that use is made of at least one substance as claimed in one of claims 1 to 11.
- 22. A microorganism, characterized in that it is able to produce at least one substance as claimed in one of claims 1 to 11.
- 23. A microorganism as claimed in claim 22, characterized in that it is a strain of the bacterial genus *Verrucosispora*, or a mutant thereof.
- 24. A microorganism, in particular as claimed in claim 22 or claim 23, characterized in that it is the strain AB 18-032 (DSM 15899) of the bacterial genus *Verrucosispora*, or a mutant thereof.
- 25. A process for preparing at least one substance as claimed in one of claims 1 to 11, comprising the procedural steps of:
- a) culturing a microorganism as claimed in one of claims 22 to 24,
 - b) obtaining a culture supernatant from the culture,
 - c) where appropriate, preparing a culture filtrate, and
- d) where appropriate, isolating one or more substances from the culture supernatant and/or the culture filtrate.
- 26. A process for preparing at least one substance as claimed in one of claims 1 to 11, comprising the procedural steps of:
- a) culturing a microorganism as claimed in one of claims 22 to 24,
- b) isolating one or more substances from the microorganism.